

CONVENTIONAL MOSFET

**FIG. 1**  
(PRIOR ART)

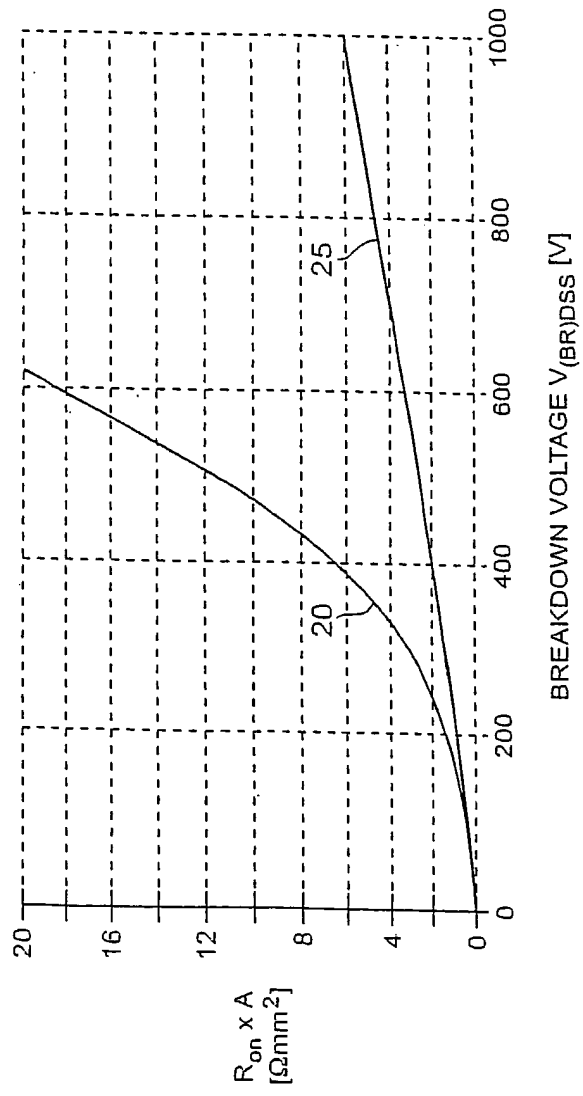
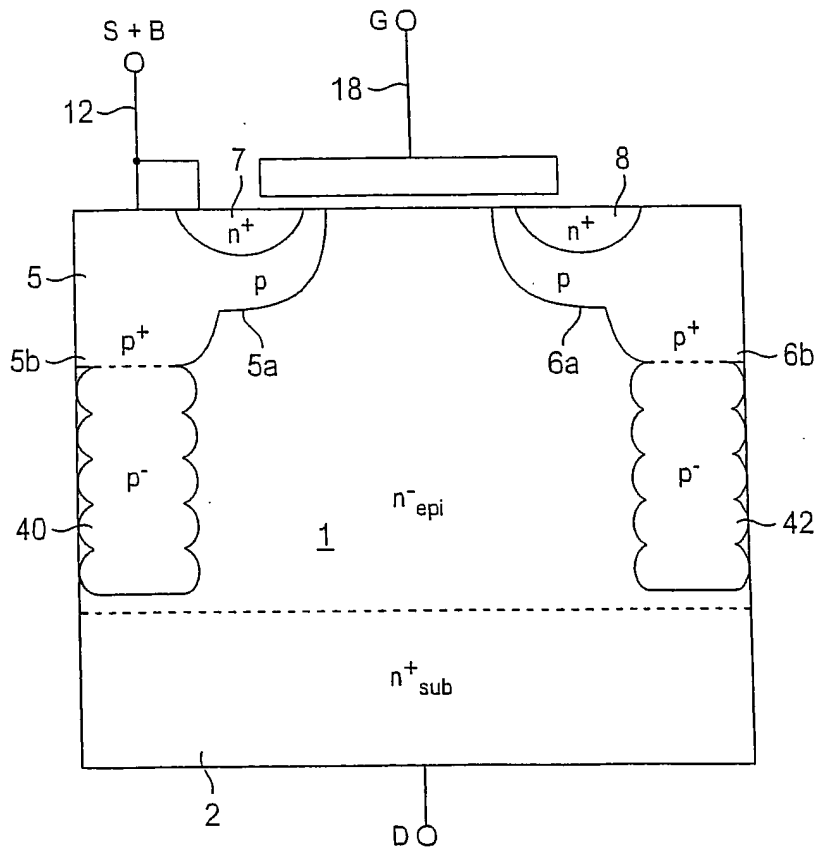
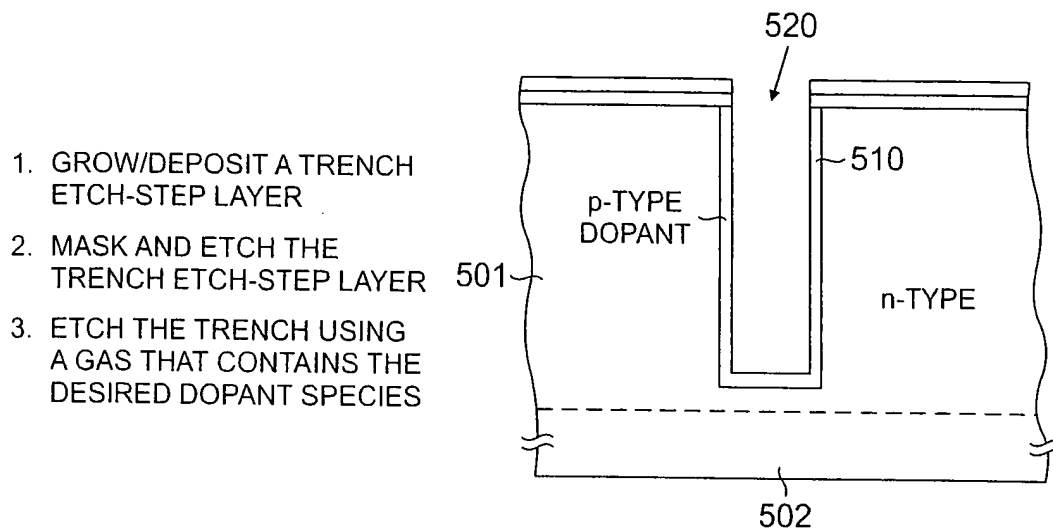


FIG. 2

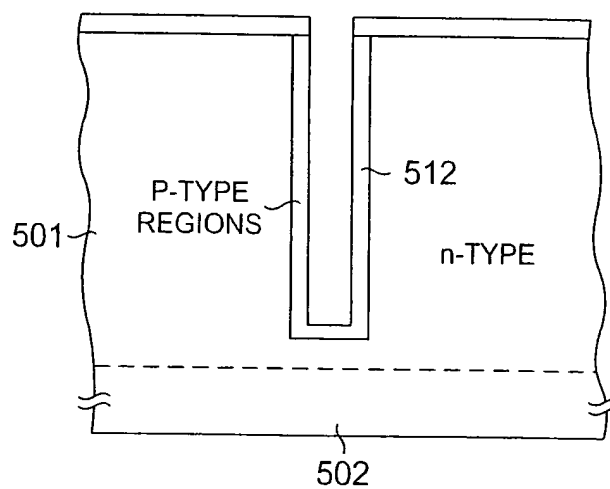


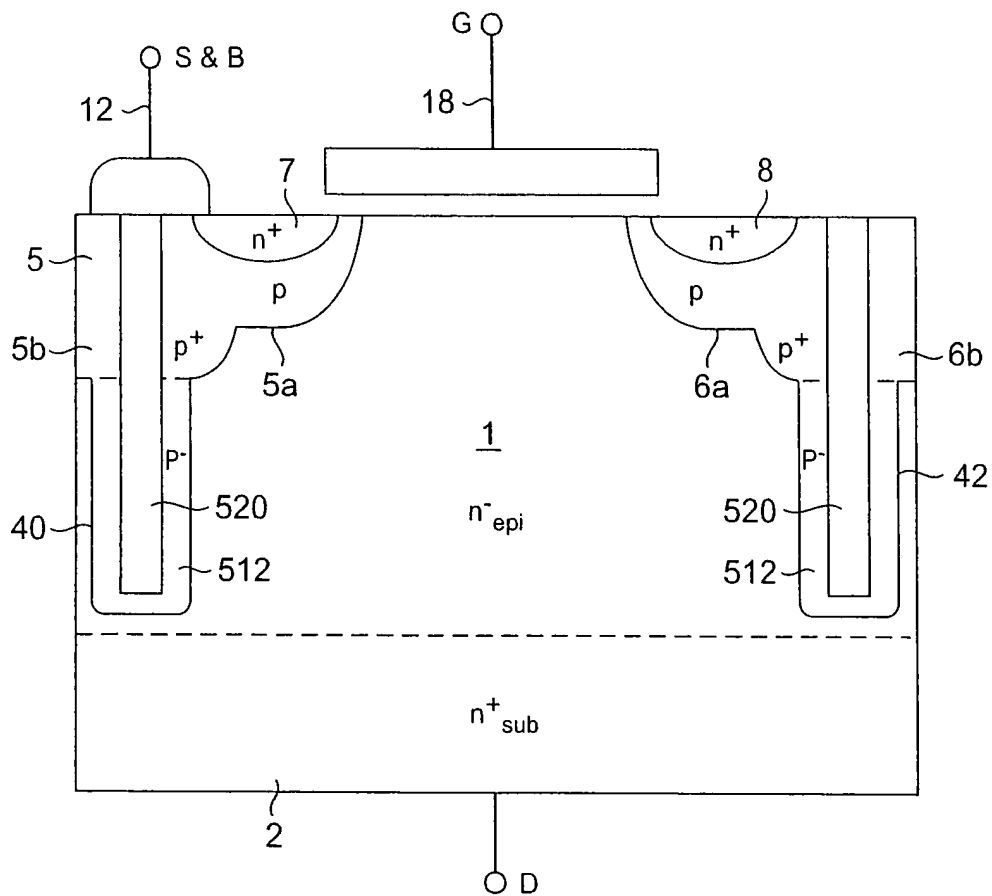
THE DOPANT DISTRIBUTION OF A HIGH VOLTAGE VERTICAL  
DMOS TRANSISTOR WITH A RELATIVELY LOW ON-RESISTANCE

FIG. 3

**FIG. 4A**

4. FILL THE TRENCH WITH A DIELECTRIC OR A HIGH RESISTIVITY LAYER
5. PLANARIZE
6. DIFFUSE THE DOPANT TO FORM THE DESIRED JUNCTION

**FIG. 4B**



THE DOPANT DISTRIBUTION OF A HIGH VOLTAGE VERTICAL  
DMOS TRANSISTOR WITH A RELATIVELY LOW ON-RESISTANCE

**FIG. 5**